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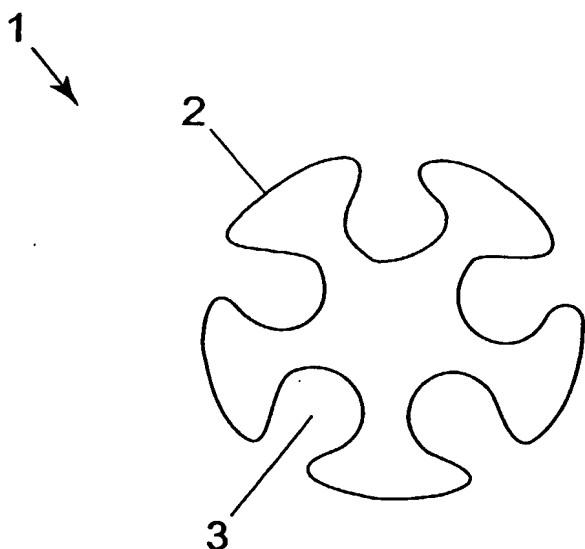
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(54) Title: SHAPED MONOFILAMENTS WITH GROOVES AND THE FABRICS MADE THEREOF



(57) Abstract: A monofilament with longitudinally oriented grooves and fabrics made thereof having reduced air permeability, wherein the reduced permeability is achieved without using additional coatings or stuffer yarns. Bicomponent monofilaments made from these grooved monofilaments using solution or wire coating have improved coating adhesion and may also include a conductive coating. In addition, the grooved bicomponent monofilaments may include a wear-indicating mechanism. Also disclosed are monofilaments with grooves formed in its surfaces. Advantageously, these grooved monofilaments exhibit improved adhesion to "sheet-grip" coatings, as compared with circular monofilaments. In addition, fabrics comprising these grooved monofilaments demonstrate improved air handling. The grooved monofilaments may be incorporated in a fabric as MD yarns, CD yarns, or both CD and MD yarns.

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A. CLASSIFICATION OF SUBJECT MATTER
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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	EP 1 333 120 A (HEIMBACH GMBH THOMAS JOSEF) 6 August 2003 (2003-08-06)	1-15, 21-27, 34-43, 48, 49
P, Y	the whole document	16-20
X	US 6 352 772 B1 (KELLER ROBERT ALLEN) 5 March 2002 (2002-03-05)	1-15, 21-27, 34-43, 48, 49
Y	the whole document	16-20
Y	US 5 617 903 A (BOWEN JR DAVID) 8 April 1997 (1997-04-08) the whole document	16-20
		-/-

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Patent family members are listed in annex.

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PCT/US 03/40529**C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT**

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 94/10539 A (GILLETTE CO ; SWEENEY PHILIP J (US); TSENG MINGCHIH M (US)) 11 May 1994 (1994-05-11) the whole document -----	52

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